

REMARKS

Claims 1, 3, 4, 6, 8, 10 and 11 have been amended, and claims 2 and 9 have been cancelled. Claims 1, 3-8, 10-14 remain for further consideration. This Amendment is in response to the Office Action of August 1, 2008 in which claims 1, 2, 4, 7-9, 11, 13 and 14 were rejected and 3, 5, 6, 10 and 12 objected to.

1. Claim 6 currently stands objected to. Claim 6 has been amended.

2-3. Claims 1, 2, 4, 7-9, 11, 13 and 14 currently stand rejected for allegedly being obvious in view of the combined subject matter of AAPA and U.S. Patent 5,966,415 to Bliss (hereinafter "Bliss").

**Claim 1**

As amended, claim 1 recites a method for filtering. The method includes:

“adaptive filtering an input signal, interpolating a filtered signal to provide an interpolated filtered signal, interpolating the input signal for adapting the adaptive filtering, and adapting properties of an interpolation of the filtered signal in response to an error signal indicative of a difference between a desired signal and the interpolated filtered signal.” (emphasis added, cl. 1).

The combined references neither disclose nor suggest adapting properties of the interpolation in response to an error signal as recited in amended claim 1. In Bliss, a baud-to-sample rate converter 134 provides a signal  $\tau_s$  that is used to control the interpolation. The signal  $\tau_s$  is a function of baud rate. In contrast, as set forth in amended claim 1, properties of the interpolation of the filtered signal are adapted in response to an error signal indicative of a difference between the desired signal and the interpolated filtered signal. The combined teachings to AAPA and Bliss neither disclose nor suggest such a claimed feature.

**Claim 8**

As amended, claim 8 recites an apparatus that includes:

“an adaptive filter for filtering an input signal;  
a first interpolator for interpolating a filtered signal to provide an interpolated filtered signal;  
a combiner that provides an error signal indicative of a difference between a desired signal and the interpolated filtered signal;  
a second interpolator for interpolating the input signal, wherein an interpolated input signal is arranged to be used to adapt the adaptive filter; and  
a first adapting block for adapting the properties of the first interpolator in response to the error signal.” (emphasis added, cl. 8)

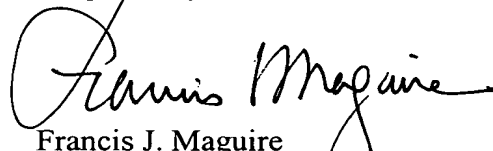
The apparatus of claim 8 adapts properties of the first interpolator in response to a signal indicative of a difference between a desired signal and interpolated filtered signal. The combined references neither disclose nor suggest such a feature. Significantly, Bliss merely discloses that the interpolator 136 receives a signal  $\tau_s$  that is a function of baud rate. In contrast, as set forth in amended claim 8, properties of the first interpolator are adapted in response to an error signal, which is indicative of a difference between the desired signal and the interpolated filtered signal. The combined teachings to AAPA and Bliss neither disclose nor suggest such a feature. Specifically, a skilled person would not be motivated to modify AAPA based upon the teachings of Bliss such that the error signal  $e(n)$  signal of AAPA is used to provide information to adapt the interpolator. Bliss merely teaches that the interpolator 136 is a FIR filter whose sampling rate interpolation interval  $\tau_s$  is controlled as function of baud rate (see element 134 in FIG. 4B of Bliss). Modifying AAPA to include Bliss’s teaching that the sampling rate interpolation interval  $\tau_s$  is controlled as function of baud rate does not provide the claimed invention, and certainly does not provide a predictable result when combined with AAPA.

4. The indication that claims 3, 5, 6, 10 and 12 contain allowable subject matter and would be allowed if amended to no longer depend from a rejected claim is noted and appreciated.

Claims 3 and 10 have been rewritten into independent claim format.

The objections and rejections of the Office Action of August 1, 2008, having been obviated by amendment or shown to be inapplicable, withdrawal thereof is requested and passage of claims 1, 3-8, and 10-14 to issue is earnestly solicited.

Respectfully submitted,



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